

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application. Please cancel claims 1-65, and add new claims 66-86 as follows:

Listing of Claims:

1-65. (Cancelled)

66. (New) A composition comprising sulfur trioxide in contact with a metal oxide layer selected from the group consisting of Ac_2O_3 , Ag_2O , Ag_2O_2 , Am_2O_3 , AmO_2 , As_2O_3 , AsO_2 , As_2O_5 , Au_2O_3 , Ba_2O , BaO , BaO_2 , BeO , BiO , Bi_2O_3 , CdO , Ce_2O_3 , CeO_2 , CoO , Co_3O_4 , Cr_2O_3 , CrO_2 , CrO_3 , Cs_2O , Cs_2O_2 , Cs_2O_3 , Cu_2O , CuO , FeO , Fe_3O_4 , Fe_2O_3 , Ga_2O , Ga_2O_3 , GeO , GeO_2 , HfO_2 , Hg_2O , HgO , In_2O , InO , In_2O_3 , Ir_2O_3 , IrO_2 , K_2O_3 , KO_2 , Li_2O , Li_2O_2 , MgO , MgO_2 , MnO , Mn_3O_4 , Mn_2O_3 , MnO_2 , MoO_2 , MoO_3 , Na_2O , Na_2O_2 , NaO_2 , NbO , NbO_2 , Nb_2O_5 , Nd_2O_3 , NiO , NpO_2 , Np_2O_5 , OsO_2 , OsO_4 , PaO_2 , Pa_2O_5 , PbO , Pb_3O_4 , PbO_2 , PdO , PoO_2 , Pr_2O_3 , PrO_2 , PtO , Pt_3O_4 , PtO_2 , PuO , Pu_2O_3 , PuO_2 , RaO , Rb_2O , Rb_2O_2 , Rb_2O_3 , RbO_2 , ReO_2 , ReO_2 , ReO_3 , Re_3O_7 , ReO_4 , Rh_2O , RhO , Rh_2O_3 , RuO_2 , RuO_4 , Sb_2O_3 , SbO_3 , Sb_2O_3 , Sc_2O_3 , SeO , SeO_2 , Sm_2O_3 , SnO , SnO_2 , SrO , SrO_2 , substoichiometric tantalum oxide, TcO_2 , TcO_3 , Tc_2O_7 , TeO , TeO_2 , ThO , ThO_2 , TiO , Ti_2O_2 , Ti_5O_5 , TiO_2 , Ti_2O , Ti_2O_3 , UO , UO_2 , U_3O_3 , UO_2 , VO , V_2O_3 , V_2O_5 , VO_2 , V_2O_5 , VO_2 , Y_2O_3 , ZnO , and ZrO_2 .

67. (New) The composition of claim 66 wherein the metal oxide layer is comprised of an alkaline metal oxide within the group.

68. (New) The composition of claim 66 wherein the metal oxide layer is comprised of an alkaline earth metal oxide within the group.

69. (New) The composition of claim 66 wherein the metal oxide layer is comprised of a rare earth metal oxide within the group.

70. (New) The composition of claim 66 wherein the metal oxide layer is comprised a transition metal oxide within the group.

71 (New) The composition of claim 66 wherein the metal oxide layer is comprised of substoichiometric tantalum oxide.

72 (New) The composition of claim 66 wherein the metal oxide layer has a thickness of 5 to 200 Angstroms.

73. (New) The composition of claim 72 wherein the metal oxide layer is comprised of substoichiometric oxide.

74. (New) The composition of claim 66 wherein the sulfur trioxide is gaseous sulfur trioxide.

75. (New) The composition of claim 74 contained under conditions of temperature ranging from 100°C to 600°C.

76. (New) The composition of claim 74 wherein the metal oxide layer is disposed on a conductive layer.

77. (New) The composition of claim 76 wherein the conductive layer comprises a material selected from the group consisting of a conductive metal, a conductive metal compound, a conductive metal alloy, and a semiconductor.

78. (New) The composition of claim 76 wherein the conductive layer comprises a material selected from the group consisting of platinum, ruthenium, palladium, iridium, rhenium, rhodium, gold, silver, ruthenium oxide, tin oxide, indium oxide, rhenium

oxide, osmium oxide, rhodium oxide, iridium oxide, doped tin oxide, indium oxide, zinc oxide, $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$, $(\text{La,Sr})\text{CoO}_3$, and SrRuO_3 .

79. (New) The composition of claim 76 wherein the conductive layer is disposed on a silicon substrate.

80. (New) The composition of claim 79 wherein the conductive layer comprises a material selected from the group consisting of: a conductive metal, a conductive metal compound, a conductive metal alloy, and a semiconductor.

81. (New) The composition of claim 79 wherein the conductive layer comprises a material selected from the group consisting of platinum, ruthenium, palladium, iridium, rhenium, rhodium, gold, silver, ruthenium oxide, tin oxide, indium oxide, rhenium oxide, osmium oxide, rhodium oxide, iridium oxide, doped tin oxide, indium oxide, zinc oxide, $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$, $(\text{La,Sr})\text{CoO}_3$, and SrRuO_3 .

82. (New) The composition of claim 66 wherein the metal oxide layer is comprised of substoichiometric tantalum oxide layer having a thickness of 5 to 200 Angstroms, wherein the sulfur trioxide is gaseous sulfur trioxide, wherein the substoichiometric tantalum oxide layer is disposed on a conductive layer and the conductive layer is disposed on a silicon substrate.

83. (New) The composition of claim 82 contained under conditions of temperature ranging from 100°C to 600°C .

84. (New) The composition of claim 82 wherein the sulfur trioxide is gaseous sulfur trioxide.

85. (New) The composition of claim 82 wherein the conductive layer comprises a material selected from the group consisting of: a conductive metal, a conductive metal compound, a conductive metal alloy, and a semiconductor.

86. (New) The composition of claim 82 wherein the conductive layer comprises a material selected from the group consisting of platinum, ruthenium, palladium, iridium, rhenium, rhodium, gold, silver, ruthenium oxide, tin oxide, indium oxide, rhenium oxide, osmium oxide, rhodium oxide, iridium oxide, doped tin oxide, indium oxide, zinc oxide, $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$, $(\text{La},\text{Sr})\text{CoO}_3$, and SrRuO_3 .